

Managing Functional Basic Education for Sustainable Leadership in Nigeria

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Abstract: Purpose of the study is to identify the correlation between vocational education, basic science and technology, cultural and creative arts education and sustainable leadership in public junior secondary schools. Three hypotheses were formulated and tested. Quantitative research design was used for the study. A self-constructed questionnaire was used for data collection. The population of this study consists of 6,472 teachers in public junior secondary schools. Sample of 364 teachers were carefully chosen with the use of Research advisor table of determining the sample size of known population. Stratified random sampling technique was used to select teachers from sampled schools. The data collected were analyzed using Pearson product moment correlation coefficient statistic. The findings revealed that there was a positive and significant relationship between vocational education, basic science and technology, cultural and creative arts education and sustainable leadership.

Key Words: managing, functional education, sustainable leadership

Abstrak: Tujuan dari penelitian ini adalah untuk mengidentifikasi korelasi antara pendidikan kejuruan, ilmu pengetahuan dan teknologi dasar, pendidikan seni budaya dan kreatif dan kepemimpinan berkelanjutan di sekolah menengah pertama negeri. Tiga hipotesis dirumuskan dan diuji. Desain penelitian kuantitatif digunakan untuk penelitian ini. Kuesioner digunakan untuk pengumpulan data. Populasi penelitian terdiri dari 6.472 guru di sekolah menengah pertama negeri. Sampel dari 364 guru dipilih menggunakan tabel *Research advisor* untuk menentukan ukuran sampel populasi yang diketahui. Teknik *stratified random sampling* digunakan untuk memilih guru dari sekolah sampel. Data dikumpulkan kemudian dianalisis dengan statistik koefisien korelasi *product moment Pearson*. Temuan penelitian adalah ada hubungan positif dan signifikan antara pendidikan kejuruan, ilmu pengetahuan dan teknologi dasar, pendidikan seni budaya dan kreatif dan kepemimpinan berkelanjutan.

Kata kunci: mengelola, pendidikan fungsional, kepemimpinan berkelanjutan

INTRODUCTION

Education plays very crucial roles in how the individual and his society developed. Functional basic education can be view as a way by which students acquire problem solving skills, scientific attitudes, open mindedness as well as learning values as a priority.

Basic education is the basis and foundation of formal education usually starting from age six to fifteen years. It is a vital section in the level of educational system of every nation. It is also an establishment which all other levels of education are built upon. Therefore, Nigeria National Policy on Education (2013) stipulated the goals of basic education as fol-

lows; provide the child with diverse basic knowledge and skills for entrepreneurship, wealth generation and educational improvement; cultivate patriotic young people and prepared them to contribute to social development and executed their civic responsibilities; teach values and raise morally upright individual capable of independent thinking and who appreciate the dignity of labor; giving chances for the child to develop manipulative skills that will enable the child function effectively and to be a leader in the society; impart citizenship education in learners in order to effectively partake and contribute manful to the development of society.

Series of studies have been embarked upon to investigate managing education and sustainable lead-

ership. Linda (2011) conducted sustainable leadership development and cross-cultural blended learning program. Andy (2007) investigated sustainable leadership and development in education, creating the future and conserving the past. Jack (2009) conducted intercultural and sustainable leadership. John (2014) carried out sustainable school leadership: teachers' perspective. Nnabuo and Asodike (2009) conducted discovering education as an instrument for sustainable development. Yusuf and Soyemi (2012) investigated sustainable economic development through technical and vocational education training. Ohunene and Ozoji (2014) conducted science education and sustainable development in Nigeria. Abdullahi and Jimoh (2018) investigated head teachers' role in managing science education for sustainable development in Nigeria. There are several areas on managing education and sustainable leadership that are not carried out by these scholars up till now. These areas comprise managing functional education, sustainable leadership, especially junior secondary education in Kwara State, Nigeria. This study managing functional basic education and sustainable leadership in Nigeria therefore attempt to seal portion of the gaps left to be study. The following objectives have been formulated to achieve the aim to: (1) Identify the relationship between vocational education and sustainable leadership in public junior secondary schools in Kwara State. (2) Examine the relationship between basic science and technology and sustainable leadership in public junior secondary schools in Kwara State. 3) Determine the relationship between cultural and creative arts education and sustainable leadership in Kwara State.

The following research questions were raised in addressing the problem of the study: (1) does vocational education bring about sustainable leadership in public junior secondary schools? (2) do basic science and technology enhance sustainable leadership in public junior secondary schools? (3) does cultural and creative arts education improve sustainable leadership in public junior secondary schools?

To gain more insight into the objectives the following hypotheses were formulated and tested: (1) There is no significant relationship between vocational education and sustainable leadership in public junior secondary schools. (2) There is no significant relationship between basic science and technology education and sustainable leadership in public junior secondary schools. (3) There is no significant relationship between cultural and creative arts and sustainable leadership in public junior secondary schools.

Functional basic education is the kind of education that emphasizes practice more than theory. It can also be views as the transmission, creation, adaptation and acquisition of knowledge, skill and value for the purpose of self-reliance and sustainable national development. Basic education refers to pre-primary education, primary education and junior secondary education (Olorunfemi, 2012). Basic education must be re-orientated to address sustainability by way of expanding it to contain serious thinking skills, interpret, and organize data, information as well as ability to analyze issues toward the betterment of communities.

Vocational education is a form of education which promotes dignity of labour by improving children for employment in recognized occupations. Vocational education gives children the skills, knowledge and attitudes live, learn and work in order to become an effective or productive citizen in a global world which will in turn make student a leader in the global society. Vocational education plays a crucial role in the economic development, raise the standard of living and general wellbeing of people in the society where almost everybody can be self-reliant and become a leader in order to gives room for sustainable national development.

Basic science and technology are education which gives room for learners to become the major actor in the classroom by ways of touching, observing, manipulating, and interacting, evaluating, taking initiative as well as exploring the next steps and way forward in bring innovating to the society and becoming achieving learners. Science and technology constitute the pillar on which the development and progress of both the individual and the nation depends.

Cultural and creative arts are basic subjects which enable students to understand and acquire further knowledge and develop creative skill. Cultural and creative arts are designed towards professional requirements of learners to be specialized in fine arts, drama and music. The teaching of cultural and creative arts subjects is compulsory in junior secondary schools and made elective at the senior secondary level. Cultural and creative arts is a channel where by people' way of life are expressed and brought about changes in economy, modernization and socialization process. Cultural arts activities in junior secondary schools are meant to develop students' creative potentials such as manual skills, self-confidence, and sense of maturity, technology and cultural knowledge, aesthetic value as well as intellectual ability by making them productive members of the society.

Leadership is a way of developing good vision and being able to expressive, so that people around you can comprehend and getting agreement on the goal setting (Okorie, 2002). Leadership is a creation of a threat free environment for growth so that the creative talents and skills of people are used to best advantage. It is believed that an essential leadership role of students is to identify and nurture any innovative ideas, efforts and act that will promote the goal of education. Leadership in this study is a natural and learned ability skill and personal characteristics which make it possible for a student within a given environment to think, act, motivate and inspire others to adopt, achieve and maintain individual or educational goals towards the realization of sustainable national development.

Sustainable leadership in education is a collective duty of building an educational setting of an organization that stimulates and welcome opinion and positive practices in communities of learning and growth (Hargreaves & Fink, 2006). Sustainable leadership means building a headship culture pertaining to moral tenacity which offers success that is accessible to all in the society. Sustainable leadership is a prudent and resourceful leadership that ensure effective utilization of human and material resources so as to ensure better future (Jack, 2009).

Sustainable leadership is a leadership that stimulating human welfare and sustaining basic needs as well as protecting the organization by taking into consideration the cognizance of future generation, and present generation without neglecting the coming generation (Abraham, 2012). Sustainable leadership means the ability of a leader to continue the transformation of both social and material resources, and improve politically, economically, culturally and environmentally in order to achieve comprehensive improvements or refinement in all ramification of its existence. Fullan (2005) view sustainable leadership as a way by which people improve the capacity of an organization by engaging in continuous development that is reliable with deep values of human benefit.

The theoretical basis of this study is centered on Path-Goal theory of leadership as cited in Durosaro and Ogunsaju (2002). This theory postulated that manager can aid job performance by presenting to the staff members how their performance directly affects their receiving desired reward. Path-goal theory identified four (4) leadership behaviour as includes (i) directive- leader tells the follower what to do (ii) supportive- the leader is kindly with and shows interest in

staff (iii) participative- the leader seeks suggestion (iv) achievement oriented- the leader demonstrates confidence in staff in achieving the goals.

This theory can also be applicable in educational setting in that educational managers such as head teachers and teachers gives directive to students by way of teaching, coaching providing necessary guidance needed to follow and supportive conduct in the area of vocational, basic science and technology and cultural and creative arts in order to achieve educational goals in terms of becoming a leader towards the achievement of sustainable national development. Therefore, the primary focus of using this theory is on how students can become leader through effective management of basic education by clarifying performance goals and the path to achieve the goals of becoming leaders in order to realize sustainable national development. This study is anchored on the Path-Goal theory of leadership in order to provide the potential leader with the elements of the important foundational base that will enhance his/her knowledge, skills, attitudes and values that are related to effective leadership. The Path-Goal theory of leadership is therefore applicable in this study in that leadership is very important in every organisation in order to have effective planning, goal-setting, developing and implementing changes as well as assessing personnel.

METHOD

Research Design

Quantitative research design was adopted in this study. This was considered appropriate for the study in that, it sought to establish the characteristic of variables of the study. Also serve as an advantage to generalize the data collected from all population and offers moderately simple and straight forward method to the study motives.

Population and Sampling of The Study

This study concentrated on public junior secondary schools in Kwara State. The target population of this study consisted of 6,472 teachers in public junior secondary schools in Kwara State as at 2015. Sample of 364 teachers were selected based on Research Advisor (2006) table of determine sample size of known population. Stratified random sampling was used to select teachers from the sample public junior secondary schools in order to guarantee

that all groups of teachers were given the same opportunity of being selected.

Instrumentation

The research instrument for the present study consisted of self-design questionnaire titled “Managing Education for Sustainable Leadership Questionnaire” (MESLQ) used for collection of data. The instrument contained two sections; section A elicited demographic data from the participants, while section B elicited information on the managing education for leadership and sustainable national development in public junior secondary schools. The participants reacted to the items on a four (4) Likers-type scale as follows: Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The gauge mean is given thus: $4 + 3 + 2 + 1 / 4 = 2.50$. The criterion mean value of 2.50 is agreed while the one below the gauge mean value is disagreed by the participants.

Reliability and Validity of Instrument

To ensure reliability of the instrument, draft copies was given to three experts in educational management and three experts in text measurement and evaluation to look into the content of the instrument. Appropriate adjustment and corrections were made on the instrument based observations and modifications of experts. In addition, 20 corrected copies were further distributed to participants who are part of the sample to observe their understanding of the items, wordings, scales and instructions of the questions in order to discover any problems that may occur in filling the questionnaire. Thus, some observation made was effected properly before sending out final copies. The corrected questionnaire was administered with the assistance of four research assistants to the participants in order to enhance effective high return rates.

The reliability of the instrument was ensured with the use of Cronbach’s alpha. The reliability index was 0.72. The reliability test revealed a high internal consistency for most of the variables.

Collection of Data Process

The questionnaire was distributed to 364 teachers in basic junior secondary schools in Kwara State. The researcher with four research assistants distributed the questionnaires to the participants of the selected sample schools upon obtaining permission from

the heads of the schools by sending a copy of letter for their permission. The participants were enlightened on the objectives of the study. The researcher and research assistants hang on for the participants to fill and response to questionnaires. The questionnaire were recovered and scored. Active administration of questionnaire was also aided by the cooperation of colleagues and friends in the sample schools. This study gives emphasis to the ethical issues in ensuring secrecy and privacy of participants’ responses in line with the guideline of Stanley and Wise (2010).

Data Analysis

The data collected for the study were analyzed using the Statistical Packages for the Social Sciences software. Descriptive analysis like mean and standard deviation was used to answer research questions. For interpretation of four point scale, the composite mean for each items was collapsed into two levels, namely agreed and disagreed, whereby below 2.50 is interpreted as (disagreed) and above 2.50 (agreed). The data gather on this study were analyzed using Pearson Product-Moment Correlation statistical analysis. Data omitted was not applicable in this study because researcher with research assistants administered questionnaire to the participants personally and guide them to fill it appropriately. All hypotheses were tested at significant level of 0.5 to determine the acceptance and refusal of the hypotheses.

RESULTS

This segment discussed the findings based on research objectives and questions. The participants’ response was also analyzed in Table 1–3.

Vocational Education

Descriptive statistical analysis was used to analyze the data gathered from 364 participants in public junior secondary schools in Kwara State as revealed in Table 1.

Table 1 shows the grand mean of teachers view on vocational education is 2.93 (SD = .979). This shows that participant accepted that vocational education brings about effective sustainable leadership. The findings indicated that two out of five vocational educations revealed a greater mean than the grand mean value. These includes *vocational education*

arouse student's interest to eager to know about training in a job ($M = 3.03$, $SD = 0.940$), followed by help in giving training and impact the necessary skills to students in order to be self-reliance economically ($M = 2.95$, $SD = 0.974$). Also one item - vocational education help students to discover their natural skills and abilities ($M = 2.93$, $SD = 0.981$) showed equal mean with overall mean of vocational education.

Meanwhile, the other two items – help students to learn different vocations ($M = 2.88$, $SD = 0.971$) and help students identify skills they can channel towards certain occupation ($M = 2.86$, $SD = 1.032$) shows lesser mean than the grand mean of vocational education. However, all items of vocational education have mean values greater mean than the criterion mean (2.50) with grand mean of (2.93) that are taken as agreed. This shows that participants agreed that vocational education improve sustainable leadership in public junior secondary schools in Kwara State.

Basic Science and Technology

The second research objective is on relationship between basic science and technology sustainable leadership in junior secondary schools as shown in Table 2.

Table 2 shows the grand mean of participants perception on basic science and technology is 2.94 ($SD = 0.953$). This implies that participants agreed that basic science and technology improve sustainable leadership. The findings for each basic science and technology indicated that two out of five basic science and technology revealed greater mean than the grand mean value. This includes *Science and technology enhances student's observation, analysis, description and interpretation.* ($M = 3.04$, $SD = 0.923$), followed by *Science and technology gives room for effective learning and self-confiders which is most important characters of nation builders* ($M = 2.96$, $SD = 0.954$).

However, the remaining three items – *science and technology improve creativity of the students* ($M = 2.93$, $SD = 0.941$), *Help students to acquire new skills and competence which will enable them develop as future scientists, engineers and technicians* ($M = 2.87$, $SD = 0.955$) and *Help students asking the right questions and drawing relevant conclusions* ($M = 2.88$, $SD = 0.991$) shows lower mean than the grand mean of basic science and technology education. Nevertheless, all items of vocational education have higher mean value than the criterion mean of (2.50) with grand mean of (2.94) that are inferred as agreed. This implies that respondents

Table 1. Vocational Education

S/N	Vocational Education	Teacher responses		Decision
		Mean	SD	
1	Help students discover their natural skills and abilities	2.93	.981	Agreed
2	Help to arouse student's interest to be eager to know about training in a job.	3.03	.940	Agreed
3	Help students to learn about different vocations.	2.88	.971	Agreed
4	Help the students identify skills they can channel towards certain occupations.	2.86	1.032	Agreed
5	Help in giving training and impact the necessary skills to students in order to be self-reliance economically.	2.95	.974	Agreed
	Grand Mean	2.93	0.979	

Table 2. Basic Science and Technology as Responded by Teachers

S/N	Basic Science and Technology	Teachers Responses		Decision
		Mean	SD	
6	Science and technology improve creativity of the students.	2.93	.941	Agreed
7	Science and technology enhance student's observation, analysis, description and interpretation.	3.04	.923	Agreed
8	Help students to acquire new skills and competence which will enable them develop as future scientists, engineers and technicians.	2.87	.955	Agreed
9	Help students asking the right questions and drawing relevant conclusions.	2.88	.991	Agreed
10	Science and technology gives room for effective learning and self-confiders which is most important characters of nation builders.	2.96	.954	Agreed
	Grand Mean	2.94	0.953	

agreed that basic science and technology education enhance sustainable leadership in public junior secondary schools in Kwara State.

Cultural and Creative Arts

Table 3 shows the analysis of data collected from 364 participants in junior secondary schools on cultural and Creative Arts. The analysis results shown in Table 3.

Table 3 revealed the grand mean of participants' perception on cultural and creative arts is 2.89 ($SD = 0.973$). This shows that teachers agreed that cultural and creative arts improve sustainable leadership. The findings of the analysis for each cultural and creative arts education showed that three out of five cultural and creative arts indicated a greater mean than the grand mean value. These are *cultural and creative arts help students attain growth in the domains of education* ($M = 2.95$, $SD = 0.949$), followed by *Gives room for life-long and experimental learning, innovating and adapting to change* ($M = 2.92$, $SD = 0.985$) and *help in solving problems through active engagement* ($M = 2.91$, $SD = 0.957$).

Meanwhile, other two items – *help students to perform by using visuals and illustrations to learn* ($M = 2.85$, $SD = 0.958$) and *help to stimulate the creative thinking and cognitive development of students* ($M = 2.84$, $SD = 1.018$) shown lower mean than the grand mean of cultural and creative arts education. In addition, all items of cultural and creative arts education have mean values greater than the cri-

terion mean of (2.50) with grand mean of (2.89) that are interpreted as agreed. This indicated that teachers agreed that cultural and creative arts education improve sustainable leadership in public junior secondary schools in Kwara State.

Hypotheses Testing

Pearson Product-moment correlation statistical analysis was used in this study.

H₀₁: There is no significant relationship between vocational education and sustainable leadership in public junior secondary schools.

Table 4 shows that calculated r- value = .89 and p-value is 0.00 level of significance. This indicated that there is significant and positive relationship between vocational education and sustainable leadership. Thus, the hypothesis which states there is no significant relationship between vocational education and sustainable leadership is rejected.

H₀₂: There is no significant relationship between basic science and technology and sustainable leadership in public junior secondary schools in Kwara State.

Table 5 shows that calculated r-value = 0.92 and p-value is = .92 and p-value notation is .000 level of significance. This indicated that there is significant and positive relationship between basic science and technology and sustainable leadership. Thus, the hypothesis which states that there is no significant relationship between basic science and technology and sustainable leadership is rejected.

Table 3. Cultural and Creative Art

S/N	Cultural and Creative Arts	Teachers Responses		Decision
		Mean	SD	
11	Help students to perform by using visuals and illustrations to learn.	2.85	.958	Agreed
12	Help students to attain effective growth in the domains of education.	2.95	.949	Agreed
13	Gives room for life-long learning, exploratory thinking, innovating and adapting to change.	2.92	.985	Agreed
14	Help to stimulate the creative thinking and cognitive development of students.	2.84	1.018	Agreed
15	Help in solving problems through active engagement.	2.91	.957	Agreed
	Grand Mean	2.89	0.973	

Table 4. Vocational Education and Sustainable Leadership

Variable	N	\bar{x}	SD	df	Cal-r	p-value	Decision
Vocational education	364	11.96	3.783	727	0.89	.000	Rejected
Sustainable leadership	364	2.93	0.979				

Table 5. Basic Science and Technology and Sustainable Leadership

Variable	N	\bar{x}	SD	df	Cal-r	p-value	Decision
Science and technology	364	11.96	3.707	727	0.92	.000	Rejected
Sustainable leadership	364	2.94	0.953				

H₀₃: There is no significant relationship between cultural and creative arts and sustainable leadership in public junior secondary schools in Kwara State.

Table 6 shows that calculated r- value = 0.92 and p-value notation is .000 level of significance. This indicated that there is significant and positive relationship between cultural and creative arts and sustainable leadership. Hence, the hypothesis which states that there is no significant relationship between cultural and creative arts and sustainable leadership is rejected.

DISCUSSION

Table 1 shows the results of question one analysis that effective vocational education bring about sustainable leadership in junior secondary schools, in such that vocational education help students discover their natural skills and abilities, help to arouse children's interest to be eager to know about training in a job, help students to learn about different vocation as well as help students identify skills they can channel towards certain occupation.

Result of hypothesis one shown that there is significant and positive relationship between vocational education and sustainable leadership. This result agreed with Ukuma, Ochedikwu and Deke (2013) that vocational education brings about desired changes in instructional delivery for growth and job creation for sustainable leadership and national development.

The findings in Table 2 show that basic science and technology enhance effective sustainable leadership in public junior secondary school in Nigeria. These are, science, and technology improve creativity of students, enhance students observation, analysis, description and interpretation, help students acquire new skills and competence which will enable them develop as

future scientists engineer and technician as well as gives room for effective learning and self-confiders which is most important characters of nation builders.

Result of hypothesis two revealed that there is significant relationship between science and technology education and sustainable leadership in public junior secondary schools in Nigeria. This result conformed to Ekanem (2007) that technology education help in creating more comfortable life and sustenance of human existence. This finding conformed to Onukaba (2003) that the disposition of citizens has a great impact on the social, political, technology advancement as well as economic of any society. This result also in line with Aker, Ksoll and Lybberty (2011) that science and technology education had significant impacts on literacy skills acquisition towards sustainable development. This result agreed with Kola (2014); Omole and Ozoji (2014) and Okoli, Obiajulu and Ella (2013) that science and technology education improve the performance of learners for sustainable leadership development.

Table 3 is based on question three analysis of findings that participants agreed with the opinion that cultural and creative arts education bring about effective sustainable leadership in public junior secondary schools, such that, cultural and creative arts help students to perform better by using visual and illustrations to learn, help students to attain growth in domains of education, gives room for life-long experimental learning, thinking, innovating and adjusting to change, help to stimulate the creative thinking and cognitive development as well as help in solving problem through active engagement.

The result of hypothesis three indicated that there is significant relationship between cultural and creative arts education and sustainable leadership in public junior secondary schools in Nigeria. This result agreed with Manza (2002) that training the young to acquire quality education can be achieved in cultural and arts

Table 6. Cultural and Creative Arts and Sustainable Leadership

Variable	N	\bar{x}	SD	df	Cal-r	p-value	Decision
Cultural and Creative Arts	364	11.72	4.309	727	0.92	.000	Rejected
Sustainable leadership	364	2.89	0.973				

education where the students are made to share equipment, tools and materials in order to encourage them to be creative and self-reliant. This result also agreed with Obiora (2006) that art education is to ignite aesthetic sensitivity of child and adult to the practices and language of the arts in order to improve their creativity. This result conformed to Sophia (2005) that arts education is a way of initiates children and adolescent into artistic techniques and language, shapes cultural uniqueness, supports self-confidence as well as respect of other culture.

Implications and Recommendations

The finding of the study would be of benefit to various stakeholders that involve in the management of education such as the school administrators, teachers, government and researchers among others. This study will be useful for the school administrators, educational managers as well as classroom teachers to identify the reasons for effective management of education in order to ensure sustainable leadership. Also, it will be of help to government and interested party to be more effective in providing necessary resources needed for appropriate management of functional education towards sustainable leadership. Furthermore, it will also be of benefit to researchers as it will serve as reference basis and guide for further research.

To ensure effective management of functional basic education for sustainable leadership, government should provide adequate equipment and facilities needed for the smooth running of vocational education in basic schools in order to help students discover their natural skills, help students to learn about different vocational work as well as impacting essential skills to students to be independently economically and better leader. Also should expanding the knowledge of basic science and technology in schools by providing adequate and appropriate resources to help students improve their creativity, enhance students observation, analysis, description and interpretation as well as acquire new skills and competency which will enable them develop as future leaders. Government should continue making cultural and creative arts education compulsory in schools because it serve as a channel whereby people ways of life are expressed and brought about changes in economy, modernization and socialization process towards effective sustainable leadership in junior secondary schools in Nigeria.

CONCLUSION

It is a clear fact that no nation can progress without having positive attitude towards vocation, science and technology education as it is very essential to the development of any nation. This paper focused on managing functional basic education and sustainable leadership in Nigeria. From the foregoing, evidently there is a compelling correlation between vocational education, basic science and technology, cultural and creative arts and sustainable leadership. In this paper vocational education was seen as a realistic alternative for the production of responsible leader and productive citizens who will contribute significantly towards a country sustainable national development. Basic science and technology education enhance production of citizens who are endowed with self-sustainable skills and talent to engaging in productive activities that will contribute to the realization of sustainable leadership. Furthermore, cultural and creative arts education also serves as a means of improving quality life towards enhancing sustainable leadership.

Further researchers can improve on this study by making use of another variables difference from vocational, basic science and technology and cultural and creative arts education as variables to measure functional basic education. This study can also be carried out in higher institution of learning as well as carry out in another State in Nigeria.

REFERENCES

- Abraham, N. M. (2012). Towards sustainable national development through well managed early childhood education. *World Journal of Education*, 2(3), 43–48.
- Aker, J. C., Ksoll, C., & Lybbert, T. J. (2012). Can mobile phones improve learning? Evidence from a field experiment in Niger. *American Economic Journal: Applied Economics*, 4(4), 94–120.
- Cook, J. W. (2014). Sustainable school leadership: The teachers' perspective. *International Journal of Educational Leadership Preparation*, 9(1), n1.
- Durosaro, F. E. M. I., & Ogunsaju, S. (2002). The craft of educational management. *Ilorin: Indemac print Media*.
- Ekanem, S. A. (2007). Philosophy, education, science and technology defined. *Philosophy, Education, Science and Technology*, Calabar: Samroi Publishers, 1–26.

- Frawley, J. (2009). Intercultural and sustainable leadership: A professional program for emerging educational leaders. *Journal of Leadership Studies*, 3(1), 39–46.
- Fullan, M. (2005). *Leadership & sustainability: System thinkers in action*. Corwin Press.
- Grooms, L. D., & Reid-Martinez, K. (2011). Sustainable leadership development: A conceptual model of a cross-cultural blended learning program. *International Journal of Leadership Studies*, 6(3), 412–429.
- Hargreaves, A. (2007). Sustainable leadership and development in education: Creating the future, conserving the past. *European Journal of education*, 42(2), 223–233.
- Jacob Kola, A. (2013). Importance of science education to national development and problems militating against its development.
- Manza, M. P. (2002). Art education in curriculum 21st century Nigeria. *Nigerian Journal of Art Education*, 1(2), 40–44.
- Marshall, J. (2005). Connecting art, learning, and creativity: A case for curriculum integration. *Studies in Art Education*, 46(3), 227–241.
- National Policy on Education (2013). Federal republic of Nigeria: Federal ministry of education. Yaba, Lagos – Nigeria.
- NimotaJibolaKadir, A., & AbiodunAkanbiGafar, J. (2018). Head teachers' role in managing science education towards sustainable development in north-central zone, Nigeria. *Malaysian Online Journal of Educational Sciences*, 6(3), 20–29.
- Nnabuo, P. O. M. & Asodike, J. D. (2009). Exploring education as a tool for sustainable development in Nigeria. *European Scientific Journal*, 8(10), 1–11.
- Obiora, J. (2006). Substantive art integration: Exemplary art education. *Journal of Art Education*, 59(6), 17–24.
- Ohunene, O. C. & Ozoji, B. E. (2014). Science education and sustainable development in Nigeria. *American Journal of Education*, 2(8), 595–599.
- Okoli, S.O., Obiajulu, A. N. & Ella, F. A. (2013). Science education for sustainable development: Challenges and prospects. *Academic Journal of Interdisciplinary Studies*, 2(6), 159–165.
- Olorunfemi, M. O. A. (2012). The Education for all assessment (EFA): country reports Nigeria. In *World education forum national assessment coordinator, federal ministry of education, Abuja*.
- Omole, C. O. & Ozoji, B. E. (2014). Science education and sustainable development. *American Journal of Education Research*, 2(8), 610–621.
- Stanley, L., & Wise, S. (2010). The ESRC's 2010 framework for research ethics: fit for research purpose?. *Sociological Research Online*, 15(4), 106–115.
- Ukuma, S., Ochedikwu, J. O., & Deke, G. N. (2013). Revamping vocational and technical education in Nigeria for sustainable development. *Mediterranean Journal of Social Sciences*, 4(12), 55.
- Yusuff, M. A., & Soyemi, J. (2012). Achieving sustainable economic development in Nigeria through technical and vocational education and training: The missing link. *International Journal of Academic Research in Business and Social Sciences*, 2(2), 71.